



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 9

75 Hawthorne Street
San Francisco, CA 94105

May 1, 2014

825 Stewart Acquisitions Partners LLC
c/o Hines
101 California Street, Suite 1000
San Francisco, California 94111
Attention: Thomas Kruggel
Thomas.Kruggel@Hines.com

c/o Hines
2479 East Bayshore Road, Suite 265
Palo Alto, California 94303
Attention: Property Manager
Karen.Bradley@Hines.com
Shawn.Hardy@Hines.com

RE: 825 Stewart Drive, Sunnyvale, California
AMD 901/902/TRW Microwave/Philips and Offsite Operable Unit Combined Sites in Sunnyvale

Dear Mr. Kruggel:

The U.S. Environmental Protection Agency ("EPA") Region 9 understands that 825 Stewart Acquisitions Partners LLC, a Delaware limited liability company ("Prospective Purchaser"), is in the process of acquiring the real property located at 825 Stewart Drive in Sunnyvale, California (the "Property") to be used for commercial purposes. Because the Site is located within the AMD 901/902/TRW Microwave/Philips and Offsite Operable Unit Combined Sites, which is listed on the National Priorities List (the "NPL Site"), Prospective Purchaser has requested a letter regarding its status as a potential property owner at the NPL Site.

EPA is providing technical vapor intrusion and community involvement and outreach support to the Regional Water Quality Control Board, San Francisco Bay Region (the "Regional Water Board") for the NPL Site. The Regional Water Board is the lead agency for actions taken at the NPL Site. The Property has been identified as a NPL Site source area requiring facility-specific source control and groundwater cleanup actions. Ongoing groundwater and vapor intrusion investigation, remediation, and monitoring are being conducted at the Property by Northrop Grumman Corporation ("Northrop"), and at the other properties within the NPL Site by Philips Electronics and Advanced Micro Devices.

Since 1983, the Regional Water Board has been the lead agency in connection with the investigation and remediation of soil and groundwater contamination at the Property. From 1968 to 1974, Aertech Industries ("Aertech") assembled and tested microwave and semiconductor components at the Property. In 1974, TRW Inc. ("TRW") acquired the Property from Aertech and in 1987 FEI Microwave bought the Property from TRW. During operations at the Property between 1968 and 1993, trichloroethene ("TCE") and several other industrial solvents, composed mainly of TCE, were stored in an underground storage tank ("UST") on the Property from

1970 until 1982. In December 2002, TRW merged with Northrop. In 2004, the Property was purchased by Pacific Landmark LLC, which is now under contract to sell the Property to Prospective Purchaser. Northrop remains responsible for site investigation and cleanup activities at the Property.

In 1983, TRW initiated an investigation of potential soil and groundwater contamination at the Property. Also that year, the UST was removed and soil in the immediate area was excavated and hauled offsite. Between 1983 and 1986, several subsurface investigations conducted in the vicinity of the former UST location and associated piping revealed elevated levels of solvents, including TCE, in the groundwater and identified the former UST location as the only site source of those solvents. The area of the former UST is also sometimes referred to in reports as the "eductor pit." A comprehensive soil investigation was conducted in 1988 to delineate the extent of soil contamination in the area of the former UST. Contamination from two other nearby volatile organic compound release sites (the former Advanced Micro Devices site at 901/902 Thompson Place and the Philips Electronics site at 811 East Arques Avenue) have commingled with the TRW plume. The commingled plume extends north to U.S. Highway 101, west to San Juan Drive and east to San Miguel Avenue. The commingled plume is managed as "The Companies Offsite Operable Unit."

Over the past 31 years, Northrop (and its predecessor TRW) have cooperated fully with the Regional Water Board, and Northrop has committed to do so in the future. In 1984, TRW excavated approximately 120 additional cubic yards of soil that had not been removed when the UST was removed in 1983. In 1985, TRW implemented a groundwater extraction and treatment system to reduce groundwater solvent concentrations and maintain hydraulic control of the groundwater plume to prevent it from migrating to other parts of the Property or offsite. Extracted groundwater was treated on site via an air stripper to remove solvents. Treated groundwater was discharged to the storm drain under a Regional Water Board discharge permit. The system operated through 2001. About 92.5 million gallons of groundwater were extracted and about 3,100 pounds of TCE were removed. In 1993, TRW installed a soil vapor extraction ("SVE") system to remove solvents from the onsite soil. Following Regional Water Board approval, the SVE system was shut down in 1996, as the cleanup goal for soil had been met. In 1999, TRW determined that the groundwater extraction and treatment system was no longer effectively removing solvent mass from the subsurface.

TRW implemented enhanced anaerobic biodegradation ("EAB") treatment at the Property in October 2000 into the affected groundwater at the former UST location. The intent of the EAB treatment was to increase the natural biodegradation rate of TCE to harmless byproducts. EAB treatment involves injection of nutrients for the naturally occurring microbes in subsurface soil and groundwater to produce hydrogen which breaks down TCE into non-toxic or harmless byproducts. Since the EAB treatment began, the rate of TCE degradation has dramatically increased in all wells within the application area. TCE has been reduced by 99% within the source area, such that TCE levels within the source area are now lower than in up-gradient site boundary wells. Based on the success of the EAB treatment and the high rate of natural attenuation occurring at the Property, the Regional Water Board approved complete shutdown of the groundwater extraction and treatment system in late 2001. Based on the initial EAB success, the EAB treatment area was expanded in 2005 to include additional site groundwater down-gradient of the former source area. Northrop will continue monitoring the effectiveness of the EAB treatment, as measured by the ongoing increased biodegradation rate of TCE and its degradation products, and will also continue monitoring overall site groundwater quality into foreseeable future until the Regional Water Board-established cleanup standards for the Property are met. In approximately 2002, the Property was redeveloped to expand the footprint of the building to cover the former UST/eductor pit area.

In December 2013, Northrop conducted sub-slab and indoor air sampling, which revealed TCE that could contribute to vapor intrusion. Based on these findings, Northrop developed a scope of work that includes: (1) further excavation of soil in the source area/eductor pit, (2) preparation and implementation of a Vapor Intrusion Mitigation Plan, including additional indoor sampling in accordance with the Regional Water Board requirements following source removal and vapor mitigation, and (3) updating the 2011 Draft Focused Feasibility Study for a revised path forward to achieve site closure. The vapor mitigation measures are

anticipated to include the destruction of the existing sub-slab monitoring wells and installation of a passive sub-slab vapor mitigation system.

EPA understands from your inquiry that Prospective Purchaser intends to complete tenant improvements at the Property to allow for its use as technology office space/R&D. EPA is supportive of such uses at the Property and expects that such uses will be allowed following Northrop's submission of the additional indoor sampling described in clause (2) above to the extent the results of such sampling show that the Site meets the requirements described in the Regional Water Board's letter to Advanced Micro Devices, Northrop and Philips Electronics dated January 10, 2014 under File No. 43S0014 (MS). The building owners and tenants will be expected to cooperate with EPA, the Regional Water Board, and Northrop by providing reasonable access to the Property for operations, maintenance, and monitoring of the indoor air and vapor intrusion control systems, as well as any future remedial activities, and implementation of institutional controls.

New property owners may be protected from Superfund liability as Bona Fide Prospective Purchasers (BFPPs) pursuant to CERCLA. CERCLA's BFPP provisions, enacted in 2002 as part of the Brownfields Amendments, state that new property owners meeting certain criteria are protected from Superfund liability as long as they meet the requirements of a BFPP. Specifically, such property owners must conduct "all appropriate inquiry" prior to acquiring the property, take "reasonable steps" to control existing contamination after acquiring the property, and otherwise meet the requirements of Sections 101(40) and 107(r) of CERCLA. EPA has published a rule defining "all appropriate inquiry," which may be found at 40 CFR Part 312. The full text of the Brownfields Amendments may be found at www.epa.gov/brownfields (follow the "Laws & Statutes" link in the left column). The BFPP provisions are 42 U.S.C. §9601(40) and §9607(r).

Consistent with EPA policy, EPA does not anticipate taking enforcement action against future owners of the Property. Please see EPA's guidance titled "Policy Toward Owners of Property Containing Contaminated Aquifers," at 60 Fed. Reg. 34790 (July 3, 1995). As with any property that overlies contaminated groundwater where investigation and cleanup operations are being conducted, EPA and Northrop may require access to the Property to conduct remedial activities. These activities may include sampling the groundwater monitoring wells to evaluate the effectiveness of the remediation system; conducting maintenance to the groundwater remediation system (e.g., underground pipes, vaults, treatment system); installation of new groundwater monitoring wells, extraction wells, and soil gas probes; and installation, operation, maintenance, and monitoring of vapor intrusion control systems.

EPA understands that Prospective Purchaser has conducted a Phase I of the Property. As noted above, to qualify as a BFPP, a new landowner must take "reasonable steps" with respect to stopping continuing releases, preventing threatened future releases, and preventing or limiting human, environmental, or natural resources exposure to earlier releases. Based on information evaluated to date, EPA believes the following would be appropriate reasonable steps with respect to the contamination at the Property:

- 1) Accommodation of the existing groundwater monitoring wells outside the footprint of the building in any future construction on the Property.
- 2) Cooperation by providing reasonable access to the Property for remedial activities as described above.
- 3) Appropriate handling and monitoring of potentially contaminated soil and groundwater encountered at the Property.
- 4) Prohibition on drilling any extraction, monitoring, or injection wells on the Property without Regional Water Board and other agency approval.
- 5) Cooperation with implementation of institutional controls at the Property to the extent required by the Regional Water Board.

Please note that this letter is provided solely for informational purposes and is based on the nature and extent of contamination at the NPL Site and at the Property known to EPA at this time. If additional information regarding the nature and extent of hazardous substance contamination at the Property becomes available, additional or different actions may be necessary to satisfy the reasonable steps criteria. The BFPP exemption has a number of continuing conditions beyond requiring the property owner to take reasonable steps. This letter does not provide a release to the property owner from CERCLA liability, but only provides information with respect to reasonable steps based on the information EPA has available at this time. Prospective Purchaser should ensure that it continues to be aware of the condition of the Property so that it is able to take reasonable steps with respect to any ongoing or newly identified areas of hazardous substance contamination.

I trust the information in this letter has helped to alleviate your concerns regarding potential liability. Should you have legal questions regarding this matter, please contact Thelma Estrada of our Office of Regional Counsel at (415) 972-3866 or by e-mail to estrada.thelma@epa.gov. If you have technical questions, contact Melanie Morash of our Superfund Division at (415) 972-3050 or by e-mail to morash.melanie@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "John Lyons", is written over a horizontal line.

John Lyons, Acting Assistant Director
Site Cleanup Branch, Superfund Division